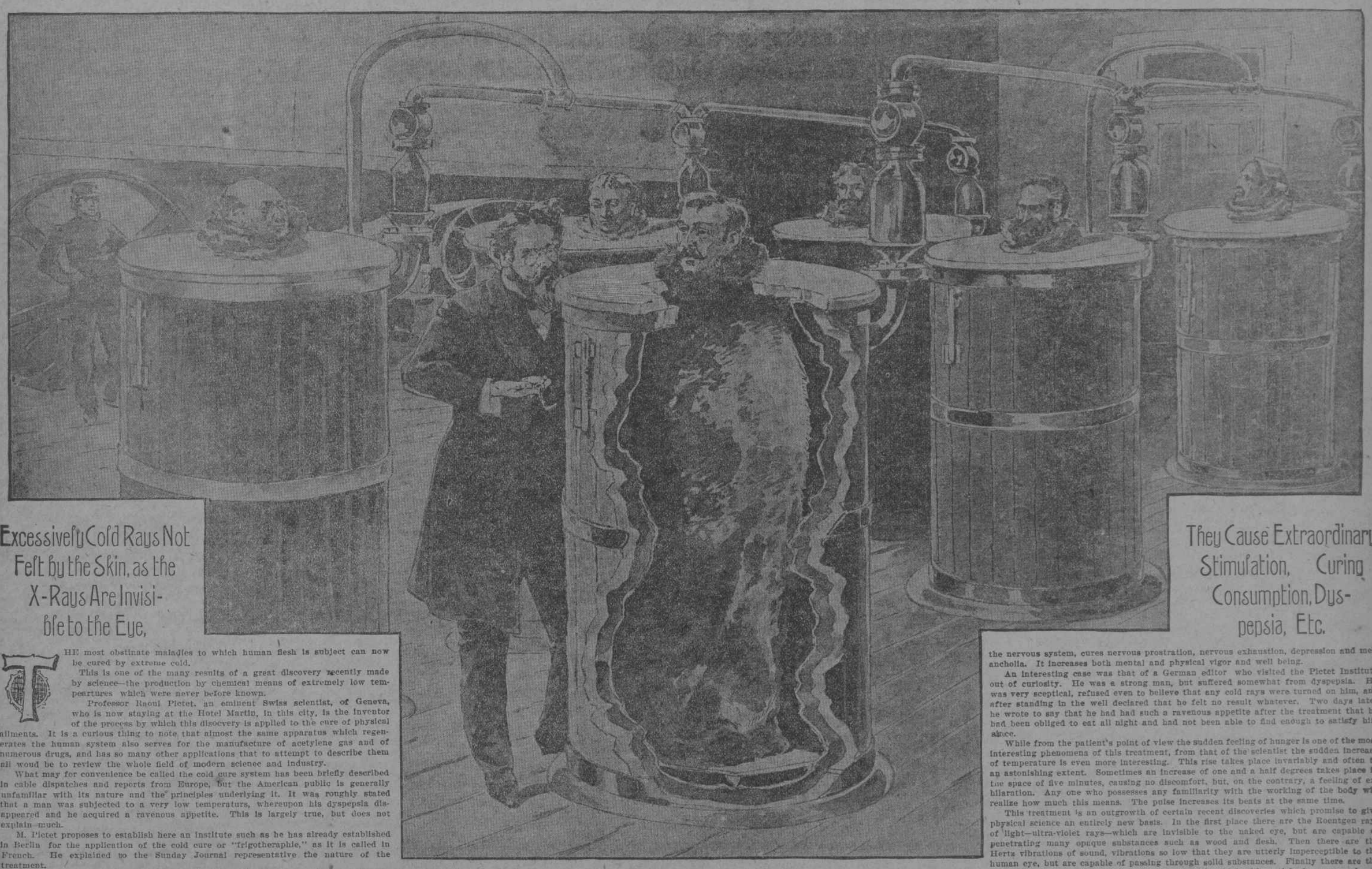
# TO FREEZE OUT DISEASE MICROBES WITHOUT FEELING IT.

Professor Pictet, who stands at the head of European scientists, gives the details of probably the most extraordinary discovery since the X rays and its intensely interesting application to the human body.



## Excessively Cold Rays Not Felt by the Skin, as the X-Rays Are Invisible to the Eye,

## They Cause Extraordinary Stimulation, Curing Consumption, Dyspepsia, Etc.

THE most obstinate maladies to which human flesh is subject can now be cured by extreme cold.

This is one of the many results of a great discovery recently made by science—the production by chemical means of extremely low temperatures which were never before known.

Professor Raoul Pictet, an eminent Swiss scientist, of Geneva, who is now staying at the Hotel Martin, in this city, is the inventor of the process by which this discovery is applied to the cure of physical ailments. It is a curious thing to note that almost the same apparatus which regenerates the human system also serves for the manufacture of acetylene gas and of numerous drugs, and has so many other applications that to attempt to describe them all would be to review the whole field of modern science and industry.

What may for convenience be called the cold cure system has been briefly described in cable dispatches and reports from Europe, but the American public is generally unfamiliar with its nature and the principles underlying it. It was roughly stated that a man was subjected to a very low temperature, whereupon his dyspepsia disappeared and he acquired a ravenous appetite. This is largely true, but does not explain much.

M. Pictet proposes to establish here an institute such as he has already established in Berlin for the application of the cold cure or "frigotheraphie," as it is called in French. He explained to the Sunday Journal representative the nature of the treatment.

In the first place, it is well to state that the cold cure is peculiarly effective in the common chronic diseases. Remarkable results have been obtained in dyspepsia, tuberculosis, liver trouble, nervous prostration, Bright's disease, albuminuria and diabetes.

The patient is placed in a well, which has a double casing or jacket, into which is poured a freezing liquid, consisting of carbonic acid and sulphurous acid. This produces a temperature within the well of 110 degrees below zero centigrade, or 166 degrees below zero Fahrenheit.

The well is six feet in height and three feet in diameter. The man inside it stands on a wooden stool, and is thoroughly covered from head to foot with a thick fur robe.

The man feels no sensation of cold. The degrees of heat from zero centigrade to —70, which constitute the most extreme cold known under natural conditions, are stopped by the fur covering, and are therefore not felt. The degrees below -110 centigrade pass through the fur, but do not produce any impression of cold, because they are too low to be perceived by human senses.

These radiations pass not only through the fur, but through the skin and the body of the man. They are not stopped by the refrigeration of the skin, as ordinary cold rays would be, because the skin cannot feel them. They pass into the body and are radiated from it, according to well-known laws.

When the body comes under the influence of these abnormal radiations passing through and through it exhibits an extraordinary stimulation. Science recognizes that there is an unconscious physical being always on the alert to protect the human organism. It is this being which causes the skin to become contracted when it feels ordinary cold. But the skin has been unable to perceive these abnormal rays, and consequently the whole physical being becomes suddenly aware of a new influence pervading it from end to end and a sudden withdrawal of energy. It responds by an extraordinary exertion. The whole body tingles and quivers, the blood circulates with redoubled energy, the digestive and other organs become tremendously active, the temperature rises and feelings of hunger, energy and vigor are created.

Professor Pictet compares this phenomenon to that of a man who is cured of paralysis by an alarm of fire in his house. Such cases have occurred frequently.

The most general result on the patients who stand in the cold well is that they immediately feel a vigorous and healthy appetite. In no ailment is the treatment so effective as in dyspepsia. A young man affected by this trouble seriously but not dangerously is likely to be cured after two or three times.

It is customary for the patients to stand in the well for ten or fifteen minutes two or three times a week.

Very successful results have been obtained in Bright's disease, albuminuria, diabetes and similar diseases. They are marked by the elimination of certain dissolved substances from the body. This elimination is at once arrested or greatly reduced by the cold treatment. The explanation seems to be that the wonderful increase of energy in the body causes these substances to be absorbed in the normal way instead of being eliminated.

The treatment acts very favorably on tuberculosis, and has apparently cured several incipient cases. Its action is apparently similar to that of high mountain air.

The cold cure causes the rapid assimilation of food and the destruction of dangerous substances. Perhaps one of its most astonishing results is the rapid disappearance of biliary calculi, which are absorbed or carried off.

When it is said this treatment cures neurasthenia it follows that it has a very favorable effect on the mental state. It quickly produces a marked invigoration of the nervous system, cures nervous prostration, nervous exhaustion, depression and melancholia. It increases both mental and physical vigor and well being.

An interesting case was that of a German editor who visited the Pictet Institute out of curiosity. He was a strong man, but suffered somewhat from dyspepsia. He was very sceptical, refused even to believe that any cold rays were turned on him, and after standing in the well declared that he felt no result whatever. Two days later he wrote to say that he had had such a ravenous appetite after the treatment that he had been obliged to eat all night and had not been able to find enough to satisfy him since.

While from the patient's point of view the sudden feeling of hunger is one of the most interesting phenomena of this treatment, from that of the scientist the sudden increase of temperature is even more interesting. This rise takes place invariably and often to an astonishing extent. Sometimes an increase of one and a half degrees takes place in the space of five minutes, causing no discomfort, but, on the contrary, a feeling of exhilaration. Any one who possesses any familiarity with the working of the body will realize how much this means. The pulse increases its beats at the same time.

This treatment is an outgrowth of certain recent discoveries which promise to give physical science an entirely new basis. In the first place there are the Roentgen rays of light—ultra-violet rays—which are invisible to the naked eye, but are capable of penetrating many opaque substances such as wood and flesh. Then there are the Hertz vibrations of sound, vibrations so low that they are utterly imperceptible to the human eye, but are capable of passing through solid substances. Finally there are the heat rays at exceedingly low temperature, with which this article is concerned. It should be remembered that science never speaks of a degree of cold, but always of a degree of heat, which may in reality be low enough to kill you with cold. These low rays of heat pass without difficulty through fur, wool and other substances which are effective non-conductors against rays of higher temperature.

As the Roentgen rays are invisible to the eye, and the Hertz vibrations inaudible to the ear, so are the exceedingly low rays of heat imperceptible to the human skin.

These rays and vibrations are evidently closely allied in their nature. They owe their penetrative capacity to the form of the oscillations which they assume in the ether which surrounds every atom of matter. They are the longest oscillations.

It was only recently that methods of producing exceedingly low temperature were discovered. Therefore this branch of science is new, like the discovery of the Roentgen rays and the Hertz vibrations. It has already given great results, and Professor Pictet believes that it furnishes the true basis for the science of chemistry.

He explains that the condition of absolute rest for matter is at —273 degrees centigrade, or absolute zero. At this temperature no chemical changes take place in a substance. As the temperature rises energy manifests itself. At certain temperatures certain chemical reactions become possible, and below them they cannot take place. Therefore, by controlling the temperature of your material, you can be sure of your reaction. M. Pictet maintains that chemistry will thus be placed on the same basis as astronomy, which has hitherto been the ideal of exact sciences.

The artificial production of exceedingly low temperature has already given great commercial results. It is responsible for acetylene gas, which is exceedingly useful as an illuminant, and may have many other uses.

Professor Pictet urges that a laboratory for the study of this subject should be established in connection with a great university. In it disease could be treated, chemistry studied and many discoveries of commercial value made.

Professor Raoul Pictet—From Photo.

## How Disease Can Be Frozen Out of the Body Explained

### BY PROFESSOR RAOUL PICTET.

THE patient, who takes the cold cure, or "frigotherapie," is placed in a well about six feet high and three in diameter. Into the jacket of this well is poured a refrigerating liquid consisting of carbonic acid and sulphurous acid ($CO_2$ and $SO_2$ liquide Pictet).

The patient stands on a stool and is enveloped from neck to feet in furs. He does not feel any impression of cold whatever, because the rays of heat that reach him are too low in the scale to be perceived by the skin.

The rays of heat from -70 centigrade down to absolute zero, or -273 centigrade, are imperceptible. Those above -70 cannot reach the patient because the furs will not conduct them.

As the well in which the patient is placed has a temperature of -110, he is only subject to heat rays at that extraordinarily low temperature. These rays have the power of penetrating wool, fur and other substances which are ordinarily non-conductors of heat, or as one would say popularly, cold.

The discovery of these rays has a relation to the Roentgen rays and the Hertz vibrations of sound. The Roentgen rays are imperceptible to the eye and have the power of penetrating opaque substances. The Hertz vibrations of sound are inaudible to the ear, but are capable of penetrating solid substances. As the Roentgen rays are invisible to the eye and the Hertz vibrations inaudible to the ear, so the low rays of heat are imperceptible to the skin.

These rays, then, pass from the well straight through the fur and into the body of the man. There is in every one of us an unconscious but intelligent being, ever on the alert to protect our physical health. It is this being which refrigerates and condenses the skin when it feels an ordinary degree of cold and thus interposes a non-conducting layer between the outside cold and the vital organs. It meets other emergencies in other ways.

But when the rays below -110 centigrade reach the body the skin gives no warning, because it feels nothing. The body feels these rays throughout its being from end to end. The unconscious physical being is then called on to make a sudden effort, and it responds with great energy.

It is also to be noted that the limit at which the fur ceases to be a non-conductor of heat is -70, while the temperature of the well is -110 centigrade. The body therefore radiates through the fur all the degrees from -70 down to -110, and does not receive them back. This loss of heat calls for additional energy in the body.

The low heat rays act upon every molecule in the body and start them into extraordinary activity. All the functions are set to work with unusual activity. The most noticeable symptom to the patient is a hearty appetite, which will remain for days after a ten-minutes' stay in the well. The physician notes a sudden but not a dangerous rise in the patient's temperature. His pulse quickens, his blood circulates vigorously, and he feels full of mental and physical energy.

The treatment is valuable in many chronic maladies, including consumption, Bright's disease, dyspepsia, liver trouble, albuminuria, diabetes, nervous prostration and insomnia.

Its effect on dyspepsia is very rapid and marked. It is apparently capable of curing consumption in an incipient form. It has a similar effect to the air of high mountains.

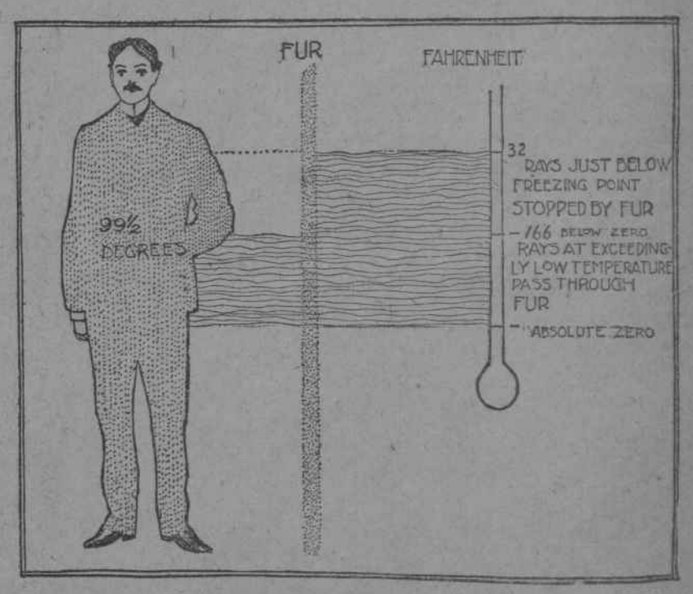
The general result of the cold treatment is a remarkable stimulation of all the functions of the body. Its action may be compared to an alarm of fire which cures a man of paralysis.

## NEW FRENCH "DIRECTORY OF HEIRESSES."

AN enterprising Frenchman with a genius for money-making has compiled and published what he calls "The Directory of Heiresses." It is having a large sale.

It contains a long and authentic list of names of unmarried women, both young and old, including widows, who "have money of their own" or "expectations." To each name is appended such interesting personal facts as age, looks, figure and other characteristics of great interest to marriageable men.

"The Directory of Heiresses" has already proven of vast usefulness. In France marriages are arranged in most cases on strictly business principles. The idea of the book is not altogether new, as in some parts of Italy, especially Genoa, there have been for years men and women called "marriage brokers," who make a specialty of bringing young people together with a view to their finding life partners. In this they are very successful. The marriage brokers publish regularly a list of the "eligibles" of both sexes in order to facilitate matters for their clients. Very liberal commissions are often paid by those who are thus introduced to each other if a marriage follows, as it very frequently does.




This Shows the Cold Rays That Reach the Body Without Your Feeling It.